

EFFICIENCY OF COMMERCIAL BANKS' CREDIT UTILIZATION IN NIGERIA (1986-2005)

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ABSTRACT

This paper examines the efficiency with which available commercial banks credit is utilized in Nigeria's agriculture from 1986- 2005. Published time series data and simple regression method was used to estimate the model. The study revealed an average technical efficiency index of 14.8 indicating that every one naira credit yielded about N14.8 income in agriculture annually. It also shows an allocative efficiency index of 2.19 indicating that though banks credit to agriculture had significant and positive influence on agricultural income, it was not optimally utilized.

KEYWORDS: Banks credit, Efficiency, Utilization, Agricultural income, Agricultural credit, Agricultural sector

INTRODUCTION

Commercial banks credit is a topical issue being discussed in Nigeria all the time because of its importance in agricultural development.

Credit is the lifeblood of modern economy. It has excited labor and stimulated production. Credit availability has phenomenally increased output, output varieties and the well being of people. Credit enhances fullest utilization of available physical capital. Credit enables agricultural producers to spread the cost of production over time in a way that is advantageous to them, catalyze farm production and drive the machineries of production up to optimum performance. Credit ensures that excess capacity does not exist in the farm enterprise, permit large scale operation, stimulate increase standard of living of farm families (Ijere, 1986).

Credit has the potential to enhance efficient resource allocation, permit application of new technology, reduce post harvest waste and stabilize farm prices, farm income and enhance efficient marketing of agricultural product. As important as credit is to an economy, in a situation of high optimism and expectation over use of credit may be induced if adequate supervision and prudential guidelines for credit control is not put in place. If overuse of credit is induced, speculation, inflation, and economic instability will be the result (Odufalu 1994).

Under normal conditions, changes in credit will influence agricultural output in the short run provided there is no idle resource. Expansion in credit would stimulate aggregate output to increase without unduly undermining price stability if there are no constraints (technological limitation and productivity shortfall). If such constraints exist, expansion of credit tends to cause prices of output to increase. This is because the use of credit with such constraints will not be able to absorb the credit expansion and translate it to agricultural output. In the absence of such constraints, credit expansion will be completely utilized and translated in to agricultural output growth. One major problem of banks agricultural loan is the use of loan outside agricultural business.

House (1974), opined that farmers with effective demand for credit are those who can benefit from the use of loan and have ability to repay productive loan and accept responsibility. He explained that farmers with effective demand for loan are those who are using or ready to use improved practices. The question of interest is whether commercial banks agricultural credit over the years has been efficiently used to effect agricultural development in Nigeria. Consequently this study is carried out to find out whether commercial banks agricultural credit in Nigeria is optimally utilized or not, so as derive some policy implication.

METHODOLOGY

Published time series data were used in this study. Data was collected from Central Bank of Nigeria (CBN) annual report and statement of Account (several issues), CBN Economic and Financial Review (1986-1997), CBN statistical Bulletin (2005), National Bureau of Statistics (2006).

Simple linear and double logarithm functions were tried. The double logarithm function was found to be the best fit and was adopted for the estimation of the model. Below is the specified model.

$$Y_t = f(X_t)$$

$$Y_t = a + bX_t + U \dots\dots\dots 1$$

$$\ln Y_t = a + b \ln X_t + U \dots\dots\dots 2$$

Y_t = income of agricultural sector, represented by agricultural GDP

X_t = commercial banks credit to agriculture

U = error term.

The coefficient of X variable is expected to have positive sign.

Table 1: Technical Efficiency Index of Banks Agricultural Credit Utilization

Years	Technical Efficiency Index
1986	58.28
1987	42.34
1988	37.01
1989	34.43
1990	29.53
1991	25.86
1992	19.01
1993	12.57
1994	7.76
1995	5.68
1996	4.49
1997	5.58
1998	5.97
1999	1.44
2000	1.20
2001	0.91
2002	0.84
2003	0.84
2004	0.83
2005	0.88
Average	14.8

Source: Computed from CBN Statistical Bulletin (2005) and National Bureau of Statistic (2006)

The allocative efficiency of banks credit utilization in agriculture was determined by ascertaining whether or not the ratio of marginal income of commercial banks agricultural credit to the cost of commercial banks agricultural credit per income is equal to one.

$$MI/L = 1$$

Where, MI is the marginal income of commercial banks agricultural credit.

L is the cost of commercial banks agricultural credit per agricultural income. The coefficient of the variable (b) of the double logarithm function is the direct elasticity of income. The marginal income was derived by multiplying the average income by the elasticity of income given that

$$EI = MI/AI$$

$$MI = EI \times AI$$

EI = elasticity of income

AI = income per credit

Adopting the method of Onyenweaku *et al* (2000) in measuring factor productivity the technical efficiency was derived by the ratio of agricultural sector income to commercial banks credit to the sector. The higher the value the more efficient credit resource is technically utilized.

$$TEC = Y/X$$

TEC is technical efficiency of the use of commercial banks agricultural credit.

RESULTS AND DISCUSSION

The result in table 1 shows that technical efficiency of commercial banks credit utilization decline from 58.28 in 1986 to 0.88 in 2005, with an average of 14.8 indicating that a naira commercial banks credit utilized in the production process generated N14.8 income in agricultural sector during the study period.

Table 2: Regression Result.

$$Y_t = 126731.8 + 0.338X_t + U$$

(32.23) (10.99)

$$R^2 = 0.87, F = 120.75$$

$$\ln Y_t = 10.627 + 0.128 \ln X_t + U$$

(136.123) (16.806)

$$R^2 = 0.940, F = 282.432$$

Source: Computed from the regression model, Note: the t values are in parenthesis.

Table 3: Estimated Coefficient

Elasticity of income (EI).....	0.128
Marginal income (MI).....	0.24
Average income per credit (AI)	1.89
Average credit per income (AC)	0.53
Average Lending Rate (ALR).....	20.75
Cost of Credit per Income (ACC).....	0.1095
Allocative Efficiency Index (AFI).....	2.19

Source: Computed from the regression results, CBN Statistical Bulletin (2005) and National Bureau of Statistics (2006)

From the estimated lead equation, the coefficient of R^2 is 0.94 indicating that 94% of variability in income of agricultural sector was explained by the independent variable. The F- ratio of 282.4 indicates the over all significance of the model at 1% level. The explanatory variable carries the expected positive sign and was significant at 1% level. (Balogun and Otu 1991, Musa, *et al* 1998, Bhattachary 1994) obtained similar result. The elasticity of income with respect to commercial banks credit to agriculture was 0.128 implying that a % increase in commercial banks credit to agriculture led to 0.128% increase in agricultural sector income.

The marginal income of commercial banks credit to agriculture was N0.24. The allocative efficiency index of credit utilization, ie the ratio of marginal income of commercial banks agricultural credit to the cost of credit per income or average price of credit per income is 2.19. This is an indication that commercial banks credit was not optimally allocated in agriculture. In fact it was under utilized. It clearly shows that there was inadequate commercial banks credit to agriculture as a result of banks unwillingness in granting credit to the agricultural sector and the use of banks credit outside agricultural businesses during the study period.

RECOMMENDATION

Commercial banks should be encouraged to use the informal finance sector in rural areas that is cost saving to channel credit to agriculture. The sector is encouraged to utilize more credit in the production system to allow for optimum credit utilization efficiency. Commercial banks can extend credit to the operators of the informal finance sector for onward lending to farmers. Farmers are equally advised not to use commercial banks agricultural credit outside agricultural business.

CONCLUSION

The study has shown that commercial banks credit to agriculture had a positive and significant effect on agricultural income. However banks credit to the sector was not optimally utilized due to inadequate supply and use outside agricultural businesses. It is on this basis that the above recommendations were made.

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